



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,160	02/24/2004	Tsuneaki Kondoh	249206US3	8288

22850 7590 10/24/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

ZACHARIA, RAMSEY E

ART UNIT PAPER NUMBER

1773

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/784,160

Applicant(s)

KONDOH ET AL.

Examiner

Ramsey Zacharia

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/12/2004 (x2).  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on 04 October 2005 is acknowledged. The traversal is on the ground(s) that a search and examination of the entire application would not place a serious burden on the Examiner. This is not persuasive because the inventions have acquired a separate status in the art as was shown by their different classification (Group I in class 428 and Group II in class 427). That the inventions have acquired a separate status in the art constitutes a *prima facie* showing of a serious burden on the Examiner. See MPEP § 803.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 10-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 04 October 2005.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Art Unit: 1773

***Specification***

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

5. Claims 7 and 8 objected to because of the following informalities: stainless steel is misspelled "stainless still." Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. The phrase "wherein said fluorocarbon resin is that a tensile strength of a 30  $\mu$ m coating film burned at 340 °C is equal or greater than 25 MPa" in independent claim 1 renders the claims 1-9 indefinite because its meaning is unclear. For the purpose of examination, the phrase is taken to mean that a 30  $\mu$ m coating film of the fluorocarbon fused at 340 °C has a tensile strength of 25 MPa or greater without limiting the thickness of the fluorocarbon film present in the fixing member to any particular thickness.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukunaga et al. (U.S. Patent 5,819,646) as evidenced by Hobson et al. (U.S. Patent 5,744,241).

Fukunaga et al. teach a fixing device comprising a core, an elastic layer, and fluorocarbon layer (column 2, lines 35-45). The fluorocarbon layer may contain various fillers such as metal (column 4, lines 2-5). In the embodiment of Example 1, the elastic layer comprised a silicone rubber and the fluorocarbon layer comprised FURON resin manufactured by Bunnell Plastics Division, a PFA resin (column 6, lines 18-41). Hobson et al. demonstrate that the FURON from Bunnell Plastics Division has an axial tensile strength of 6258 psi (column 14, lines 32-56), which corresponds to about 43 MPa.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukunaga et al. (U.S. Patent 5,819,646) in view of Suzuki et al. (U.S. Patent 4,796,046).

Fukunaga et al. teach all the limitations of claims 5 and 6, as outlined above, except for the presence of 1-5 mass% of carbon filler. However, Fukunaga et al. do teach that their fluorocarbon layer may be made electrically conductive (column 3, line 67-column 4, line 1).

Suzuki et al. teach that adding 1-10 wt% of a filler, such as carbon black, to a fluoropolymer layer of a fuser members results in an electrically conductive layer without impairing the releasability of the coating layer to toner images. (column 6, lines 7-19).

One skilled in the art would be motivated to make the fluorocarbon layer of Fukunaga et al. electrically conductive by adding 1-10 wt% of carbon black so that the resulting layer will be electrically conductive without impairing its releasability to toner images.

13. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukunaga et al. (U.S. Patent 5,819,646) in view of Ream et al. (U.S. Patent 6,284,373).

Fukunaga et al. teach all the limitations of claims 7 and 8, as outlined above, except for the material for the core of the fixing member.

Ream et al. disclose that cores of fusing members are typically metal rolls or polyimide belts (column 1, lines 55-67). Suitable metals include aluminum, stainless steel, and copper alloys (column 4, lines 9-13).

Ream et al. disclose that polyimide belts and aluminum or stainless steel rolls are known in the art as suitable cores for fuser members. Therefore, it would be obvious to one skilled in the art to use one of these known cores as the core in the fixing member of Fukunaga et al. because the selection of a known material based on its suitability for its intended use supports a *prima facie* obviousness determination. See MPEP 2144.07.

Art Unit: 1773

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518.

The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ramsey Zacharia**  
**Primary Examiner**  
**Tech Center 1700**